Abstract

A memory control system and method is disclosed. In one embodiment, a first memory is coupled to one or more additional memories. The first memory receives requests

5   for data that are completed by retrieving the data from the first memory and/or the one or more additional memories. The manner in which this data is retrieved is determined by the state of programmable control indicators. In one mode of operation, a reference is made to the first memory to retrieve the data. If it is later determined from tag information stored by the first memory that the one or more additional memories must be accessed to fulfill the

10 request, the necessary additional memory references are initiated. In another mode of operation, references to the one or more additional memories are initiated irrespective of whether these references are required. The operating mode may be selected to optimize system efficiency.